WELCOME TO THE MONTHLY LEARNING WEBINAR

The presentation will begin shortly
General Housekeeping

• Use the chat box to register your name, facility represented and all participating team members.

• To prevent distractions, please mute all phones:
  – Please DO NOT put phones on hold to avoid playing background music we are unable to control.

• Use the chat box for questions during the presentation but please hold comments until the end of the session.

• All collaborative members want to learn from your wins and challenges so please share!
AIM Bundles

**READINESS**
- Hemorrhage cart with supplies, checklist, and instructions cards for intrauterine balloon and compression devices
- Immediate access to hemorrhage medications (kit or equivalent)
- Establish a response team - who to call when help is needed (blood bank, advanced gynecologic surgery, other support and tertiary services)
- Establish massive and emergency release transfusion protocols (type-O negative/unmatched)
- Unit education on protocols, unit-based drills (with post-drill debriefs)

**RECOGNITION & PREVENTION**
- Every patient
  - Assessment of hemorrhage risk (prenatal, at admission, and at other appropriate times)
  - Measurement of cumulative blood loss (normal, as quantitative as possible)
  - Active management of the 3rd stage of labor (department-wide protocol)

**RESPONSE**
- Every hemorrhage
  - Unit-standard, stage-based, obstetric hemorrhage emergency management plan with checklists
  - Support program for patients, families, and staff for all significant hemorrhages

**REPORTING/SYSTEMS LEARNING**
- Every unit
  - Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities
  - Multidisciplinary review of serious hemorrhages for process issues
  - Monitor outcomes and process metrics in perinatal quality improvement (QII) committee
AIM: Reduce SMM in women who have a hemorrhage by 20% by 12/2020.

**Readiness**
- Hemorrhage Cart and Immediate Access to Hemorrhage Medications
  - Establish a response team
  - Establish and maintain a massive transfusion protocol
  - Unit education on implicit bias, protocols and unit-based drills

**Recognition**
- Assessment of hemorrhage risk on admission to the unit
- Measurement of cumulative blood loss, as quantitative as possible
- Active management of 3rd Stage of Labor

**Response**
- Unit-standard, stage-based OB hemorrhage emergency management plan with checklists
- Support program for patients, families and staff for all significant hemorrhages

**Reporting/Systems Learning**
- Multidisciplinary review of serious hemorrhages for systems issues
- Establish a culture of huddles for high-risk patients and post even debriefs to identify successes and opportunities
### GaPQC Hemorrhage Goals by 12/2020

<table>
<thead>
<tr>
<th>Measure</th>
<th>Type</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe Maternal Morbidity&lt;br&gt;No. of women with severe maternal morbidities (e.g. Acute renal failure, ARDS, Pulmonary Edema, Puerperal CNS Disorder such as Seizure, DIC, Ventilation, Abruption) / No. pregnant &amp; postpartum women with postpartum hemorrhage diagnosis</td>
<td>Outcome</td>
<td>20% reduction</td>
</tr>
<tr>
<td>Risk Assessment&lt;br&gt;No. of women had a hemorrhage risk assessment with risk level assigned, performed at least once between admission and birth and shared among the team/ no. of women</td>
<td>Process</td>
<td>100%</td>
</tr>
<tr>
<td>Debriefs on all cases requiring ≥4 units RBCs or admission to the ICU</td>
<td>Process</td>
<td>100%</td>
</tr>
<tr>
<td>Quantified blood loss&lt;br&gt;No. of women who had measurement of blood loss from birth through recovery period using quantitative and cumulative techniques/no. of women</td>
<td>Process</td>
<td>100%</td>
</tr>
<tr>
<td>Measure</td>
<td>Report Date/Completion Date</td>
<td>Question</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>S1: Patient, Family &amp; Staff Support</td>
<td>Report Completion Date</td>
<td>Has your hospital developed OB specific resources and protocols to support patients, family and staff through major OB complications?</td>
</tr>
<tr>
<td>S2: Debriefs</td>
<td>Report Start Date</td>
<td>Has your hospital established a system in your hospital to perform regular formal debriefs after cases with major complications?</td>
</tr>
<tr>
<td>S3: Multidisciplinary Case Reviews</td>
<td>Report Start Date</td>
<td>Has your hospital established a process to perform multidisciplinary systems-level reviews on all cases of severe maternal morbidity (including women admitted to the ICU, receiving ≥4 units RBC transfusions, or diagnosed with a VTE)?</td>
</tr>
<tr>
<td>S4: Hemorrhage Cart</td>
<td></td>
<td>Does your hospital have OB hemorrhage supplies readily available, typically in a cart or mobile box?</td>
</tr>
<tr>
<td>S5: Unit Policy and Procedure</td>
<td>Report Completion Date</td>
<td>Does your hospital have an OB hemorrhage policy and procedure (reviewed and updated in the last 2-3 years) that provides a stage based management plan with checklists?</td>
</tr>
<tr>
<td>S6: EHR Integration</td>
<td>Report Completion Date</td>
<td>Were some of the recommended OB Hemorrhage bundle processes (i.e. order sets, tracking tools) integrated into your hospital's Electronic Health Record system?</td>
</tr>
</tbody>
</table>
### AIM Hemorrhage Process Measures

<table>
<thead>
<tr>
<th>P1: Unit Drills</th>
<th>Unit Drills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Has your hospital developed OB specific resources and protocols to support patients, family and staff through major OB complications?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P2: Provider Education</th>
<th>Provider Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The number of OB providers and CNMs that completed an educational program on OB hemorrhage? The number of OB providers and CNMs that completed training on implicit bias?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P3: Nursing Education</th>
<th>Nursing Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The number of OB nurses that completed an education program on the OB Hemorrhage bundle elements and unit standard protocol? The number of OB nurses that completed training on implicit bias?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P4: Risk Assessment</th>
<th>Risk Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The number of mothers had a hemorrhage risk assessment with risk level assigned, performed at least once between admission and birth and shared among the team?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P5: Quantified Blood Loss</th>
<th>Measurement of Blood Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The number of mothers that had measurement of blood loss from birth through the recovery period using quantitative and cumulative techniques?</td>
</tr>
</tbody>
</table>
Process Measures for Hemorrhage

Georgia Collaborative-wide Rate (April 2018-September 2019)

- Hemorrhage Provider Education
- Hemorrhage Nurse Education
- Hemorrhage/Protocol Provider Education
- Hemorrhage/Protocol Nurse Education
- Hemorrhage Risk Assessment
- Blood Loss Measurement
Implicit Bias Training Resources

- [https://implicit.harvard.edu/implicit/takeatest.html](https://implicit.harvard.edu/implicit/takeatest.html)

Future training opportunities:
- Train the trainer
- Online Training
- Annual GaPQC meeting
Implementation of an OB Hemorrhage Risk Tool to Improve the Care of High Risk OB Patients Experiencing a Post-Partum Hemorrhage

CARLOTTA GABRIELE, MSN-ED., RN
GRACE SOBERS, MSN, RN, WHNP-BC
Grady Background

- 970 Bed Public Academic Hospital
- Regional Perinatal Center
- 2500 deliveries per year
- 11% Complicated by PPH
Journey to Excellence

- Emory University
- Morehouse School of Medicine
- Anesthesia
- Nursing Staff
- Nursing Education
- Pharmacy
- HIMT
- Quality Department
Key Drivers

AIM STATEMENT
Improve the quality of care of women experience OB hemorrhage within 24 hours of delivery while receiving care in Grady Health System

Recognition & Prevention
- Developments of Standardized Assessment of Hemorrhage Risk Factors
- Implement OB Hemorrhage Risk Assessment Tool

Assessment of hemorrhage risk (prenatal, on admission and other appropriate times.)
Risk Assessment Tool
Risk Assessment Tool
Implementation
Results

Hemorrhage Risk Assessment Adherence

% Hemorrhage Risk Assessment Adherence

- Actual % RAT Completed
- Goal % RAT Completed

Grady Health System
Results

Postpartum Hemorrhage Rates, 2014-2019

- 2014: 7.20%
- 2015: 7.70%
- 2016: 8.20%
- 2017: 10.70%
- 2018: 9.00%
- 2019: 7.00%
Conclusion

LESSONS LEARNED
References


Augusta University Medical Center: OB Emergency Department

Carla Allen, MSN, RNC-OB
12/3/2019
Objectives

• How & why we formalized triage into an OB Emergency Department (OBED)
• The screening tools we use for OBED
• Impacts on maternal care by addressing the care of the postpartum patient
Background

• Augusta University Medical Center (AU Health) is the regional Perinatal Center for the East Central region of Georgia

• We are an academic medical center with approximately 1400 deliveries annually

• New service line: Obstetrics Emergency Department Est. July 2018
  • The first 24/7 Obstetrics Emergency Department (OB ED) in Augusta, Georgia dedicated to treating unexpected pregnancy and post delivery issues
  • Georgia has one of the highest maternal morbidity & mortality rates in the nation so along with pregnant women over 20 weeks we also see postpartum women up to 6 weeks out from delivery
Formalizing the OBED

- Interdisciplinary planning meetings began in January 2018
- Nursing superusers identified
  - Policy and workflow development
  - Implementation plan for staffing
- All nurses completed the AWHONN Maternal Fetal Triage Index Training in May-June 2018
- Purchased ultrasound machine & infant warmer dedicated for this area
- Marketing campaign June-July 2018
Triage Assessments
Level of Acuity is assigned based on Chief Complaint using MFTI Algorithm

- Level 1 is the most acute & should be seen IMMEDIATELY

The level of acuity then flows to our tracking board which alerts the MD of level based on shading on the tracking board (this mimics the MFTI algorithm)
MEOWS Scoring

Vital Signs pull from initial triage data & nurse completes the MEOWS (Medical Early Obstetrical Warning Signs)

<table>
<thead>
<tr>
<th>MEOWS Early Warning Score</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEOWS Pulse</td>
<td>60-99</td>
</tr>
<tr>
<td>MEOWS Systolic Blood Pressure</td>
<td>(I) Low 80..</td>
</tr>
<tr>
<td>MEOWS Diastolic Blood Pressure</td>
<td>(I) 50-99</td>
</tr>
<tr>
<td>MEOWS Respiratory Rate</td>
<td>13-20</td>
</tr>
<tr>
<td>MEOWS SPO2</td>
<td>95-100</td>
</tr>
<tr>
<td>MEOWS Level of Consciousness</td>
<td>Alert</td>
</tr>
<tr>
<td>MEOWS Temperature</td>
<td>36.1 - 38.5</td>
</tr>
<tr>
<td>MEOWS Urine &lt; 35ml/2hrs</td>
<td>No</td>
</tr>
</tbody>
</table>

**MEOWS Reference Score**

<table>
<thead>
<tr>
<th>TOTAL MEOWS SCORE</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>Continue monitoring at ordered frequency.</td>
</tr>
<tr>
<td>3-5</td>
<td>Notify Primary RN of results, including pain &amp; urine output. Re-evaluate VS in 4 hours. If patient has score of 6-5 nurse should assess patient to determine if additional monitoring or physician notification is necessary.</td>
</tr>
<tr>
<td>6-8</td>
<td>Notify Primary RN of results. RN to bedside within 10 minutes to further assess pain and urine output to evaluate impacts on MEOWS score. Re-evaluate VS in 1 hour. If patient has 3 consecutive scores of &gt;6, consider moving patient to higher level of care. Immediate notification of resident MD required if Oliguria (&lt;35ml in 2 hours), maternal agitation/confusion, or patient with hypertension reporting headache or shortness of breath.</td>
</tr>
<tr>
<td>9-21</td>
<td>CALL PRIMARY RN &amp; CHARGE NURSE IMMEDIATELY. Notify Attending MD immediately (should be available at bedside within 10 minutes). Recommended RRT &amp; possible move to higher level of care.</td>
</tr>
</tbody>
</table>

**MEOWS SCORE FOR PROTOCOL**

<table>
<thead>
<tr>
<th>SCORE</th>
<th>3 (Low)</th>
<th>2 (Low)</th>
<th>1 (Low)</th>
<th>0</th>
<th>1 (High)</th>
<th>2 (High)</th>
<th>3 (High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PULSE</td>
<td>&lt;30</td>
<td>30-40</td>
<td>41-59</td>
<td>60-99</td>
<td>100-120</td>
<td>121-129</td>
<td>130-300</td>
</tr>
<tr>
<td>SYS BLOOD PRESSURE</td>
<td>40-70</td>
<td>71-79</td>
<td>80-89</td>
<td>90-139</td>
<td>140-150</td>
<td>151-160</td>
<td>151-360</td>
</tr>
<tr>
<td>DIA BLOOD PRESSURE</td>
<td>40-89</td>
<td>90-99</td>
<td>100-110</td>
<td>111-360</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESPIRATORY RATE</td>
<td>0-8</td>
<td>9-12</td>
<td>13-20</td>
<td>21-29</td>
<td>30-35</td>
<td>36-100</td>
<td></td>
</tr>
<tr>
<td>SPO2</td>
<td>&lt;85</td>
<td>86-90</td>
<td>91-94</td>
<td>95-100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEVEL OF CONSCIOUSNESS</td>
<td>Alert</td>
<td>Reacts only if aroused</td>
<td>Agitation, Confusion</td>
<td>Unresponsive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEMPERATURE</td>
<td>&lt; or equal to 35.0</td>
<td>35.1-36.0</td>
<td>36.1-37.9</td>
<td>38.0-38.5</td>
<td>&gt;38.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>URINE</td>
<td>No</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Post Partum Hemorrhage Risk Scoring

- Pre-Birth Scoring
  - Antepartum Patients
  - Intrapartum Patients
  - Done on Admission & at least every shift

- Post—Birth Scoring
  - Postpartum Patients
  - Done immediately post delivery

- Scores create an icon for Medium & High Risk Patients that flow to the tracking board
## OBED Patient Data

### Acuity Levels & PP Visits

<table>
<thead>
<tr>
<th></th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMA/LWBS</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>PP Visits</td>
<td>20</td>
<td>22</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>19</td>
<td>18</td>
<td>17</td>
<td>23</td>
<td>22</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Level 5</td>
<td>12</td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Level 4</td>
<td>83</td>
<td>74</td>
<td>89</td>
<td>69</td>
<td>68</td>
<td>45</td>
<td>49</td>
<td>59</td>
<td>55</td>
<td>68</td>
<td>59</td>
<td>60</td>
</tr>
<tr>
<td>Level 3</td>
<td>112</td>
<td>89</td>
<td>90</td>
<td>94</td>
<td>70</td>
<td>109</td>
<td>99</td>
<td>93</td>
<td>95</td>
<td>93</td>
<td>92</td>
<td>104</td>
</tr>
<tr>
<td>Level 2</td>
<td>59</td>
<td>62</td>
<td>72</td>
<td>49</td>
<td>78</td>
<td>67</td>
<td>67</td>
<td>75</td>
<td>83</td>
<td>61</td>
<td>59</td>
<td>80</td>
</tr>
<tr>
<td>Level 1</td>
<td>6</td>
<td>18</td>
<td>7</td>
<td>13</td>
<td>16</td>
<td>13</td>
<td>8</td>
<td>5</td>
<td>16</td>
<td>11</td>
<td>11</td>
<td>13</td>
</tr>
</tbody>
</table>
Hours Data

Arrival to RN assessment, 0:11
Arrival to MD assessment, 0:41
Arrival to Decision, 2:29
Additional Actions

• Review stats monthly at our Perinatal Quality Meeting
• Continue to work on get <2hrs arrival to decision average
• Use Post-Birth Warning Tools & OBED information Card to direct Postpartum patients back to OBED for care
Questions??

Contact Info:
Carla Allen – Nurse Manager
AUHealth Perinatal Services
callen@augusta.edu
Hemorrhage Education Plan

Webinar:
• January 7, 2020: Implicit Bias, Dr. Magloire, Grady Health Systems

Regional Training:
• Clinical Simulation Drills and Debrief
Joining the GaPQC Team!
SAVE THE DATE
APRIL 23–24, 2020
Georgia Perinatal Quality Collaborative
3rd Annual Meeting
Atlanta, GA

Agenda and registration information to follow.
For more info: Visit www.geogapqc.org or email info@geogapqc.org
Questions?